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# CRITICAL NOTES ON AMERICAN VULTURES.

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The following observations and notes were made while studying the Cathartidae in connection with the continuation of Ridgway's unfinished work, The Birds of North and Middle America.

## 1. The Genus *Coragyps*.

Current literature treats with this monotypic genus as comprising two races, the North American black vulture, *C. atratus atratus* (Bechstein) and the South American form, *C. atratus foetens* (Lichtenstein). The latter subspecies is said to be smaller, but otherwise not different, from the nominate race. However, there has been considerable difference of opinion among investigators as to whether or not the two forms were constant in their differences. Thus, Todd (Ann. Carnegie Mus., xiv, 1922, 142) treated the black vulture binomially; Wetmore (Bull. 133, U. S. Nat. Mus., 1926, 90) called his South American birds *C. atratus foetens*, but wrote that in a limited series he was unable to find any sharply trenchant difference between northern and southern birds.

Through the kindness of Mr. John T. Zimmer, of the American Museum of Natural History, I have been able to borrow a series of South American birds to amplify the material in Washington. All in all I have seen 10 specimens of *foetens* (from Argentina, Chile, Ecuador, and Brazil) and twice that many of typical *atratus*. My findings are as follows: South American birds have wings ranging from 412–432 mm. (one Chilean specimen 405 mm.); North American birds measure, in this dimension, from 415–454 mm. The average of the South American birds is 421 mm., that of the North American series 432.8 mm. It may be seen that although North American birds may achieve considerably greater proportions than South American specimens, yet, practically all (8 out of 10) of the latter group may be matched by North American birds. In other words, if we accept size as a valid criterion of race, we can identify none of the South American birds by this means, and only the larger examples from North America. Not only are the variational limits of *foetens* almost wholly

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contained within those of *atratus*, but the difference between the averages of the two is less than 3% of their size. Therefore, I conclude that we are not justified in separating *foetens* from *atratus* and the name of the black vulture throughout its entire range is simply *Coragyps atratus*.

2. The genus *Cathartes*.

Study of a long series of birds from North and Central America and the West Indies has revealed the existence of a hitherto undescribed subspecies, the one inhabiting western North America. No name being already available for this form, it may be called

**Cathartes aura teter**, subsp. nov.

*Type.*—Adult female, coll. Biological Survey, U. S. Dept. Agriculture 285275, collected at Riverside, California, April 12, 1892, by A. H. Higginson.

*Subspecific characters.*—Similar in coloration to *C. a. aura* and *C. a. septentrionalis*, but with the small wing of the former and the long tail of the latter race.

*Measurements of type.*—Wing (chord) 504; tail 258; culmen from cere 25; tarsus 62 mm.

*Remarks.*—Of this new form I have seen 33 adult specimens; their dimensions are as follows (sexes alike): wing 480–528 [one specimen 543] (507); tail 252–282 (262.4); culmen from the cere 24–26 (24.9); tarsus 62–68 (65 mm.). Compared with this are the following data on 24 adult specimens of *septentrionalis:* wing 530–563 (545.6); tail 260–289 (279.2); culmen from the cere 23–26.5 (25.1); tarsus 60–67 (64.2 mm.). Of the nominate race 20 adults show the following size variations: wing 475–514 (492.2); tail 235–250 (246); culmen from the cere 20.5–25.5 (24.8); tarsus 63–68 (65.4 mm.).

The ranges of the three forms of the turkey vulture may be outlined as follows:

*1. C. a. aura:* The lower, tropical portions of Mexico from Vera Cruz; Quintana Roo, Yucatan; Mazatlan; Sinaloa; Tres Marias Islands; south through Central America to Panama (Farfan; Canal Zone; Barro Colorado) and to northern Colombia (Rio Frio; Magdalena; Mamatoco, Santa Marta); also in the Bahamas, Cuba, Isle of Pines, Jamaica, Porto Rico (introduced), and the Virgin Islands; possibly formerly in Hispaniola.

*2. C. a. septentrionalis:* Southern Ontario, central New York, Connecticut, and New Jersey, Ohio, Indiana, Illinois, and eastern Iowa, south through Missouri and Arkansas to Louisiana, the Gulf States generally and to southern Florida (at least to Miami and Cedar Keys; no specimens seen from the extreme tip of the peninsula or the keys, where it is not impossible that *aura* may occur). Breeds north to southeastern Michigan, southeastern New York and Connecticut, winters throughout its range except north of the Ohio Valley; casual in northern Ontario, northern New England, New Brunswick, and Newfoundland. (One record from British Columbia!)

*3. C. a. teter:* Austral zones from southern British Columbia, central Alberta, Saskatchewan, southern Manitoba, Wisconsin, northern Minnesota, and southwestern and south-central Michigan south to southern lower California, northern Mexico (Sonora (Guadaloupe Canyon), Chihuahua, and Tamaulipas south in the plateau to Michoacan), east to eastern Texas, Oklahoma, Kansas, Nebraska, the Dakotas, Minnesota, and south-central Michigan, intergrading with *septentrionalis* in southeastern Michigan, and probably in western Missouri. Winters from California to Nebraska and southward.

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Owing to the fact that the western form extends eastward as far as south central Michigan, it became imperative to know to which form the name *septentrionalis* should apply. *Septentrionalis* is based on Maximilian's, Prince of Wied, birds from New Harmony, Indiana. Apparently no museum possessed a topotypical specimen and it was not until Miss Louise M. Husband, Librarian of the Workingmen's Institute, New Harmony, very kindly took the trouble of having a specimen shot and sent to the United States National Museum, especially for use in this study, that it was possible to settle this matter. The New Harmony bird is of the large, eastern race, to which the name *septentrionalis* must therefore be applied.